

AMENDMENT AND RESPONSE TO OFFICE ACTION

(c) [a first intein sequence fused to the portion of the gene encoding the carboxy-terminus of a first encoded protein] modified intein sequences, modified by fusing to the carboxy-terminus portion of each gene except the last gene to be expressed, and

[(d) a second intein sequence fused to the portion of the gene encoding the carboxy-terminus of a second encoded protein,

(e)](d) transcription termination sequences,

wherein at least [the first] one of the intein [sequence] sequences can catalyze excision of the exteins, and wherein the excised exteins are not ligated.

Please cancel claims 3-5.

11. (Amended) The DNA construct of claim 10 wherein [one or more inteins comprise exteins and the first residue of the 3'-terminal extein is engineered to contain a glycine or alanine] the DNA construct encodes a glycine or alanine linking the intein and extein amino acid sequences.

12. (Amended) The construct of claim 4 wherein the proteins are selected from the group consisting of acyl CoA dehydrogenases[]], acyl CoA oxidases, catalases, alpha subunits of beta-oxidation, beta subunits of beta-oxidation, PHA synthases with medium chain length substrate specificity, beta-ketothiolases, NADH or NADPH dependent reductases, PHA synthases with short chain length specificity, and PHA synthases that incorporate both short and medium chain length substrates.

15. (Amended) A method for expressing multiple genes in cells comprising transforming the cells with a DNA construct comprising:

AMENDMENT AND RESPONSE TO OFFICE ACTION

a) a single promoter at the 5' end of the construct,

b) multiple genes, or exteins, encoding one or more proteins,

c) [a first intein sequence fused to the portion of the gene encoding the carboxy-terminus of a first encoded protein] modified intein sequences, modified by fusing to the carboxy-terminus portion of each gene except the last gene to be expressed, and

[(d) a second intein sequence fused to the portion of the gene encoding the carboxy-terminus of a second encoded protein,

(e)](d) transcription termination sequences,

wherein at least [the first] one of the intein [sequence] sequences can catalyze excision of the exteins, and wherein the excised exteins are not ligated.

16. (Amended) The method of claim 15 for expression in a [eucaryotic] eukaryotic cell wherein the transcription termination sequences comprises a polyadenylation signal at the 3' end of the construct.

Please cancel claims 17 and 19.

25. (Amended) The method of claim 24 wherein [one or more inteins comprise exteins and the first residue of the 3'-terminal extein is engineered to contain a glycine or alanine] the DNA construct encodes a glycine or alanine linking the intein and extein amino acid sequences.

26. (Amended) The method of claim 18 for making polyhydroxyalkanoates in plants wherein the proteins are selected from the group consisting of acyl CoA dehydrogenases[]], acyl CoA oxidases, catalases, alpha subunits of beta-oxidation, beta subunits